

BIOGRAPHICAL SKETCH

NAME		POSITION TITLE	
Martha Stampfer, Ph.D.		Senior Scientist	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Radcliffe College, Harvard U., Cambridge MA	B.A.	1968	Biology
Mass. Institute of Technology, Cambridge MA	Ph.D.	1972	Cell Biology

A. Positions

07/72-05/73	Research Associate, Mass. Institute of Technology (with Dr. David Baltimore)
09/73-08/76	Postdoctoral Fellow, Arthritis Foundation, UC San Francisco (with Dr. Gordon Tomkins)
10/76-07/94	Staff Scientist, Lawrence Berkeley Laboratory, University of California
07/94-present	Senior Scientist, Lawrence Berkeley National Laboratory, University of California

Awards and Other Professional Activities

Phi Beta Kappa

Associate Editor, Cancer Research, May 1989-2003

Ad Hoc Member, NIH Cellular Physiology Review Group, 1981-1983

Ad Hoc Reviewer for NIH site visits and study sections, DOD Breast Cancer Research Program, CA Breast Cancer Research Program

Deposition of cell cultures: NIH Aging Institute Repository, ATCC

B. Selected publications:

Stampfer, M, Hallowes, R, Hackett, AJ, Growth of normal human mammary epithelial cells in culture. In Vitro 16:415-425, 1980.

Stampfer, M.R., Vlodavsky, I., Smith, H.S., Ford, R., Becker, F.F., Riggs, J., Fibronectin Production by Human Mammary Cells. J. Natl. Cancer Inst. 67:253-261, 1981.

Stampfer, MR, Bartholomew, JC, Smith, HS, Bartley, J, Metabolism of benzo(a)pyrene by human mammary epithelial cells: toxicity and DNA adduct formation. Proc Natl Acad Sci (USA) 78:6251-6255, 1981.

Smith, H.S., Lan, S., Ceriani, R., Hackett, A.J., Stampfer, M.R., Clonal Proliferation of Cultured Non-malignant and Malignant Human Breast Epithelia. Cancer Res. 41:4637-4643, 1981.

Stampfer, MR, Cholera toxin stimulation of human mammary epithelial cells in culture. In Vitro 18:531-537, 1982.

Bartley, J.C., Bartholomew, J.C. Stampfer, M.R., Metabolism of Benzo(a)pyrene in Human Mammary Epithelial and Fibroblast Cells: Metabolite Pattern and DNA Adduct Formation. J. Cell. Biochem. 18:135-148, 1982.

Yang, T.C., Stampfer, M.R., Smith, H.S., Response of Cultured Normal Human Mammary Epithelial Cells to X-rays. Radiat. Res. 96:476-485, 1983.

Hammond, SL, Ham, RG, Stampfer, MR, Serum-free growth of human mammary epithelial cells: rapid clonal growth in defined medium and extended serial passage with pituitary extract, Proc Natl Acad Sci (USA) 81:5435-5439, 1984.

Stampfer, MR, Isolation and growth of human mammary epithelial cells. J Tissue Cult. Meth. 9:107-116, 1985.

Wolman, SR, Smith, HS, Stampfer, M, and Hackett, AJ, Growth of diploid cells from breast cancer, Cancer Genet. Cytogen 16:49-64, 1985.

Bartley, J.C., and Stampfer, M.R., Factors Influencing Benzo(a)pyrene Metabolism in Human Mammary Epithelial Cells. Carcinogenesis 6:1017-1022, 1985.

Stampfer, MR. and Bartley, JC, Induction of transformation and continuous cell lines from normal human mammary epithelial cells after exposure to benzo(a)pyrene. Proc Natl Acad Sci (USA) 82:2394-2398, 1985.

Clark, R, Stampfer, M, Milley, B, O'Rourke, E, Walen, K, Kriegler, M, Kopplin, J, McCormick, F, Transformation of human mammary epithelial cells by oncogenic retroviruses, Cancer Res, 48:4689-4694, 1988.

Stampfer, M.R., and Bartley, J.C., Human Mammary Epithelial Cells in Culture: Differentiation and Transformation. In: Breast Cancer: Cellular and Molecular Biology (R. Dickson, M. Lippman, eds.), Kluwer Academic Publishers, Boston, MA, pp.1-24, 1988.

Walen, KH, and Stampfer, MR, Chromosome analyses of human mammary epithelial cells (HMEC) at stages of chemically-induced transformation progression to immortality, *Cancer Genet Cytogen* 37:249-261, 1989.

Hosobuchi, M, and Stampfer, M, Effects of transforming growth factor β on growth of human mammary epithelial cells in culture, *In Vitro* 25:705-713, 1989.

Taylor-Papadimitriou, J, Stampfer, M, Bartek, J, Lewis, A, Boshell, M, Lane, EB, Leigh, IM, Keratin expression in human mammary epithelial cells cultured from normal and malignant tissue: relation to *in vivo* phenotypes and influence of medium, *J Cell Sci* 94:403-413, 1989.

Valverius, E., Bates, S.E., Stampfer, M., Clark, R., McCormick, F., Salomon, D.S., Lippman, M.E., Dickson, R.B., Transforming Growth Factor Alpha and its Receptor in Human Mammary Epithelial Cells: Modulation of Epidermal Growth Factor Receptor Function with Oncogenic Transformation. *Mol. Endocr.* 3:203-214, 1989.

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Bates, SE, Valverius, E, Ennis, BW, Bronzert, DA, Sheridan, JP, Stampfer, M, Mendelsohn, J, Lippman, ME, Dickson, RB, Expression of the TGF α /EGF receptor pathway in normal human breast epithelial cells, *Endocrin.* 126: 596-607, 1990.

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Valverius, E.M., Ciardiello, F., Heldin, N-E., Blondel, B., Merlo, G., Smith, G., Stampfer, M., Lippman, M., and Dickson, R.B., and Salomon, D.S., Stromal Influences on Transformation of Human Mammary Epithelial Cells Overexpressing c-myc and SV40T, *J. Cell Physiol.* 145: 207-216, 1990.

Sanford KK, Price FM, Rhim JS, Stampfer MR and Parshad R, Role of DNA repair in malignant neoplastic transformation of human mammary epithelial cells in culture. *Carcinogenesis* 13: 137-1141, 1992.

Yang TC-H, Craise, LM, Prioleau, JC, Stampfer, MR, Rhim, JS. Chromosomal changes in cultured human epithelial cells transformed by low- and high-LET radiation, *Adv Space Res.* 12:127-136, 1992

Milazzo G, Giorgino F, Damante G, Sung, C., Stampfer, M.R., Vigneri, R., Goldfine, I.S., and Belfiore, A. Insulin receptor expression and function in human breast cancer cell lines. *Cancer Research* 52, 3924-3930, 1992.

Taylor-Papadimitriou, J., and Stampfer, M.R., Culture of Human Mammary Epithelial Cells, in: *Cell & Tissue Culture: Laboratory Procedures*, Eds. Griffiths, J.B., Doyle, A., Newell, D.G., Wiley-Liss, pp107-133, 1992.

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Stampfer, MR, Pan, C-H, Hosoda, J, Bartholomew, J, Mendelsohn, J, and Yaswen, P, Blockage of EGF receptor signal transduction causes reversible arrest of normal and immortal human mammary epithelial cells with synchronous reentry into the cell cycle, *Exp Cell Res* 208: 175-188, 1993.

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Matthay, MA, Thiery, J-P, Lafont, F, Stampfer, MR, and Boyer, B, Transient effect of epidermal growth factor on the motility of an immortalized mammary epithelial cell line, *J. Cell Sci.* 106: 869-878, 1993.

Slingerland, JM, Hengst, L, Pan, C-H, Alexander, D, Stampfer, MR, Reed, SI, A novel inhibitor of cyclin/cdk activity detected in TGF- β arrested cell, *Mol Cell Biology* 14: 3683-3694, 1994.

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Stampfer, MR, Garbe, J, Levine, G, Lichtsteiner, S, Vasserot, AP, Yaswen, P, hTERT expression can induce resistance to TGF β growth inhibition in p16^{INK4A}(-) human mammary epithelial cells, *Proc Natl Acad Sci (USA)* 98: 4498-4503, 2001.

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Stampfer, MR, Taylor-Papadimitriou, J, and Yaswen, P., Culture of human mammary epithelial cells, in *Culture of Epithelial Cells*, 2nd Edition, Ed. Freshney, I., Wiley-Liss, 2002.

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Garbe, J, Holst, CR, Bassett, E, Tlsty, T, Stampfer, MR, Inactivation of p53 function in cultured human mammary epithelial cells turns the telomere-length dependent senescence barrier from agonescence into crisis, *Cell Cycle* 6: 1927-1936, 2007.

Sudo, H, Garbe, JC, Stampfer, MR, Barcellos-Hoff, MH, Kronenberg, A, Karyotypic instability and centrosome hyperamplification in the progeny of finite lifespan human mammary epithelial cells exposed to sparsely or densely ionizing radiation, *Rad Res*, 170: 23-37, 2008.

Noga Bloushtain-Qimron N, Yao, J, Eric L. Snyder Shiptisin, M, Lauren L. Campbell, Mani, SA, Hu, M, Chen, H, Vadim Ustyansky, Antosiewicz, JE, Argani, P, Halushka, MK, Thomson, JA, Pharoah, P, Porgador, A, Sukumar, S, Parsons, R, AL, Andrea L. Richardson, Stampfer, MR, Gelman, RS, Tatiana Nikolskaya, Yuri Nikolsky, Polyak, K, Cell type-specific DNA methylation patterns in the human breast, *PNAS* 105:, 2008.

LaBarge, MA, Nelson, CM, Villadsen, R, Ruth, JR, Stampfer, MR, Petersen, OW, Bissell, MJ, Functional identification of putative human mammary stem cell niche proteins, submitted.

Patents:

M. Stampfer, H. Smith, A. Hackett, Enhanced Growth Medium and Method for Culturing Human Mammary Epithelial Cells, U.S. Patent No. 4,423,145, issued December 27, 1983.

M. Stampfer, Continuous Human Cell Lines and Method of Making Same; U.S. Patent No. 4,808,532, issued February 28, 1989.

M. Stampfer, J Garbe, Increasing Cell Culture Population Doublings for Long- Term Growth of Finite Life Span Human Cell Cultures, patent filed April 1, 2007.